

### **REMARKS**

Claims 1-74 were pending.

By virtue of this response, Claims 1, 2, 4-8, 10, 13-16, 22-23, 26, 31, 33-34 and 40-42 are amended.

Claims 43-74 are cancelled.

Therefore, Claims 1-42 are presently pending.

Amendment and cancellation of certain claims is not to be construed as a dedication to the public of any of the subject matter of the claims as previously presented.

No new matter is added.

### **Objections to the claims**

The Examiner noted a small informality in claim 1. We have corrected this error and thank the Examiner for having brought this informality to our attention and for having afforded this opportunity to make this correction. We have carefully reviewed the remaining claims in these same regards and believe that no other concerns of this sort remain following entry of this Amendment.

### **Claim Rejection under 35 U.S.C § 101**

On page 2 of the Office Action, Claim 40 was rejected under 35 U.S.C. 101. We have amended this claim to now specify that the “computer program product” is “non-transitory” and hence passes muster under 35 U.S.C. 101.

For the record, we note that the Examiner suggests in his Office Action that a claim must describe something that meets the “concrete, useful and tangible” test. With all due respect, these criteria no longer represent a valid test in these regards. Instead, effective August 24, 2009, the Patent Office issued interim instructions to govern the evaluation of claims for compliance with the requirements of 35 U.S.C. 101 and has since followed up with Interim Guidance for Determining Subject Matter Eligibility for Process Claims in

View of *Bilski v. Kappos* issued July 27, 2010. We therefore recommend and advise that any further evaluation of claim 40 in these regards be made with respect to those instructions.

**Claim Rejection under 35 U.S.C § 103(a)**

On page 6 of the Office Action, Claims 1-10, 13-16, 18-28, 31-34, 36-40, and 43-74 were rejected under 35 USC § 103(a) as being unpatentable over Suumäki et al. (US6,847,610 B1), hereafter “Suumäki”, in view of Jungck et al. (US2006/0029104 A1), hereafter “Jungck”. Applicants are traversing this rejection.

The application presently contains three independent claims, namely Claims 1, 19, and 40. Each of independent Claims 1, 19, and 40 recites: “stateful inspector configured to ***block*** [blocking] ***application-specific packets in the packet stream that are not the requested application-specific packets***; and session manager configured to activate [activating], in response to the stateful inspector detecting the requested application-specific packets, a plurality of packet sessions with application-specific QoS parameters, ***without requiring explicit cooperation of application software***”. A basis for this feature is provided, for example, in paragraphs [0017]-[0020] and [0053] from the Specification as originally filed.

The Office Action suggests that Suumäki discloses each of the features of Claim 1, other than ‘***means for blocking application-specific packets in the packet stream that are not the requested application-specific packets***’.

The Office Action then further suggests that, in the same field of endeavor, Jungck discloses the aforementioned features lacking from Suumäki in paragraph [0175], lines 1-15 and paragraph [0176], lines 6-16. Based thereon, the Office Action states that it is ‘obvious at the time the invention was made to modify the invention of Suumäki and have it include means for blocking application-specific packets in the packet stream that are not the requested application-specific packets, as taught by Jungck. The Office Action then further suggests that the motivation would have been in order to “enhance Internet infrastructure to

more efficiently deliver content from providers to users and provide additional network throughput, reliability, security and fault tolerance (see par. 0006 lines 1-4)".

In response, Applicants respectfully disagree.

It is respectfully submitted that the Office Action fails to establish *prima facie* obviousness for the following reasons. Below, Applicants explain that Suumäki, in view of Jungck, does not teach all of the elements of Claims 1, 19 and 40.

The Office Action suggests that Suumäki discloses the feature of Claim 1 of: ***"session manager configured to activate, in response to the stateful inspector configured to detect the requested application-specific packets, a plurality of packet sessions with application-specific QoS parameters, without requiring explicit cooperation of application software"***. The Office Action suggests that Suumäki discloses this feature of Claim 1 in col. 7, lines 37-43 in combination with the text on col. 11, line 51 to col. 12, lines 2.

In response, Applicants respectfully disagree.

Suumäki clearly and explicitly discloses the following process:

- (i) An application in the mobile terminal (MT) starts. Such interaction between the application software and QoS functionality is possible because Suumäki acknowledges that all the applications are contained within the Mobile terminal (MT). This is stated in col. 8, lines 55-56, the first paragraph in claim 1 and figure 3a;
- (ii) The SAPI informs the QMOC that the application has started. The examiner acknowledges this fact by the statement on page 5 of the Office Action: "The socket application programming interface (SAPI) informs the QMOC of any particular application wishing to establish a connection with another application or service". This function of Suumäki is also clearly shown in figure 3a, where application H still has a connection to the QMOC via the SAPI.

- (iii) The QMOC selects an appropriate QoS from the QoSDB, after being informed that the application has started. In the text from col. 11, line 51 to col. 12, line 2, as cited by the Examiner, Suumäki makes it clear that the SAPI does not provide the QoS requirements for the application that has just started. Instead the QMOC block itself contains a data base of required service QoS requirements (see at least QoSDB in figure 3a, Suumäki); and
- (iv) The QMOC configures a packet filter in the packet classifier so that packets flow onto the correct PDP context. It is noteworthy that a stateful inspection to determine the start of the session is not conducted in Suumäki (because Suumäki uses explicit cooperation of application software) and this happens before the QMOC knows that an application has started. The Examiner has acknowledged this fact by quoting col.8 lines 42-48 and col. 11 lines 55-60, which clearly disclose that the QMOC configures a packet filter in the packet classifier after the QMOC knows that the application has started.

Accordingly, it is clear that Suumäki completely relies upon the initial cooperation of the application software and that without such cooperation a corresponding packet session cannot be activated. In particular, a skilled artisan is taught that Suumäki provides no mechanism for detecting a request of application-specific packets in a packet stream without the help of the SAPI.

Furthermore, a skilled artisan is taught that Suumäki requires that the *application software (SAPI)* indicates that *an application is started and QMOC has predefined service information*, i.e. a second wireless packet transfer of application-specific data packets for that service/application (such as Voice over IP) is activated *only with explicit cooperation of application software*. The QMOC function determines whether a new PDP context is to be started and how the mapping is performed (see col. 11, lines 55-57). Only then is a data transfer filter defined so that packets can be filtered and packets sent down a particular PDP context. Of note is that the IP headers are applied *after* the SAPI interface.

The Examiner has acknowledged this fact on page 7 of the Office Action, by citing Figure 5, col. 8, lines 42-48 and col. 11, lines 55-60 to argue that Suumäki discloses the claimed feature of "stateful inspector configured to detect requested application-specific packets in a packet stream". Clearly, in contrast to the Examiner's suggestion, the configuration of the data transfer filter occurs *after* the SAPI has indicated to the QMOC that an application has started. Thus, Suumäki clearly does not disclose the claimed feature of: "session manager configured to activate, in response to stateful inspector detecting requested application-specific packets, a plurality of packet sessions with application-specific QoS parameters without explicit cooperation of application software", and indeed teaches the direct opposite.

Amongst other things, claim 1 specifies activating packet sessions without requiring the explicit cooperation of the application software. This, Suumäki does not disclose. Claim 1 further specifies that such activation is done in response to detecting application specific packets. This, too, Suumäki does not disclose. Instead, Suumäki's applications are specifically required to themselves initiate such activation; it would be hard to imagine a clearer case of "explicit cooperation."

Accordingly, and with all due respect, the Examiner clearly errs by considering the contribution of Suumäki as being relevant to the examination of a claim that is directed to a feature that requires "*without explicit cooperation of application software*".

Thus, Applicants respectfully disagree that Suumäki discloses the feature of "*session manager configured to activate, in response to the stateful inspector detecting the requested application-specific packets*", a plurality of packet sessions with application-specific QoS parameters, *without requiring explicit cooperation of application software*", as recited in claim 1.

Claim 19 is a method claim corresponding to the apparatus of Claim 1. Consequently, the arguments set forth above in support of Claim 1 apply equally to Claim 19. In accordance with the aforementioned explanations, it is therefore respectfully submitted that

the teachings of Suumäki in combination with Jungck fail to teach: “activating, *in response to detecting the requested application-specific packets*, a plurality of packet sessions with application-specific QoS parameters, *without requiring explicit cooperation of application software*”, as recited in claim 19.

Claim 40 is a computer program product claim corresponding to the apparatus of Claim 1 and method of Claim 19. Consequently, the arguments set forth above in support of Claim 1 apply equally to Claim 40. In accordance with the aforementioned explanations, it is therefore respectfully submitted that the teachings of Suumäki in combination with Jungck fail to teach: “activating, *in response to the detecting the requested application-specific packets*, a plurality of packet sessions with application-specific QoS parameters, *without requiring explicit cooperation of application software*”, as recited in claim 40.

Claims 11 and 29 are rejected under 35 USC § 103(a) as being unpatentable over Suumäki in view of Jungck and further in view of Dorenbosch et al. (US 2003/0235184 A1) hereafter “Dorenbosch.”

For at least the reason that Claims 11 and 29 each depend from an allowable independent Claim, Claims 11 and 29 are also allowable. While the applicant believes that other arguments are available to highlight the allowable subject matter presented in various ones of these dependent claims, the applicant also believes that the comments set forth herein regarding allowability of the independent claims are sufficiently compelling to warrant present exclusion of such additional points for the sake of brevity and expedited consideration. Applicants respectfully request reconsideration and allowance of Claims 11 and 29.

Claims 12, 17, 30, and 35 are rejected under 35 USC § 103(a) as being unpatentable over Suumäki in view of Jungck and further in view of Fenton et al. (US 2003/0193967 A1), hereafter “Fenton.”

For at least the reason that Claims 12, 17, 30, and 35 each depend from an allowable independent Claim, Claims 12, 17, 30, and 35 are also allowable. While the applicant

believes that other arguments are available to highlight the allowable subject matter presented in various ones of these dependent claims, the applicant also believes that the comments set forth herein regarding allowability of the independent claims are sufficiently compelling to warrant present exclusion of such additional points for the sake of brevity and expedited consideration. Applicants respectfully request reconsideration and allowance of Claims 12, 17, 30, and 35.

On page 15 of the Office Action, Claims 41 and 42 are rejected under 35 USC § 103(a), as being unpatentable over Suumäki in view of Jungck and further in view of Boyle et al. (US2005/0235349 A1), hereafter “Boyle”. Applicants are traversing this rejection.

For at least the reason that Claims 41 and 42 each depend from an allowable independent Claim, Claims 41 and 42 are also allowable. While the applicant believes that other arguments are available to highlight the allowable subject matter presented in various ones of these dependent claims, the applicant also believes that the comments set forth herein regarding allowability of the independent claims are sufficiently compelling to warrant present exclusion of such additional points for the sake of brevity and expedited consideration. Applicants respectfully request reconsideration and allowance of Claims 41 and 42.

For at least the reason that Claims 2-10, 13-16, 18, 20-28, 31-34 and 36-39 each depend from an allowable independent Claim, Claims 2-10, 13-16, 18, 20-28, 31-34, and 36-39 are also allowable. While the applicant believes that other arguments are available to highlight the allowable subject matter presented in various ones of these dependent claims, the applicant also believes that the comments set forth herein regarding allowability of the independent claims are sufficiently compelling to warrant present exclusion of such additional points for the sake of brevity and expedited consideration. Applicants respectfully request reconsideration and allowance of Claims 2-10, 13-16, 18, 20-28, 31-34, and 36-39.

In summary, none of the references discloses or suggests a solution to the scenario where an apparatus for session control in a wireless communication network where the apparatus detects requested application-specific packets in a packet stream and bases decisions to map packets to different PDP contexts without requiring explicit cooperation of application software, e.g. a use of, say, a SAPI interface, as required by the claims. For at least this reason, the applied prior art references, alone or combined, do not teach or suggest all the claim limitations for Claims 1-42.

Accordingly, Applicant respectfully requests reconsideration and allowance of Claims 1-42.

#### CONCLUSION

The case is believed to be in condition for allowance and notice to such effect is respectfully requested. If the Examiner should have any other points of concern, the Examiner is expressly invited to contact the undersigned by telephone to discuss those concerns and to seek an amicable resolution.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY



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